

## Peer Review Report

# Review Report on PRIMARY CARE PHYSICIANS' PERSONAL AND PROFESSIONAL ATTRIBUTES ASSOCIATED WITH FORGOING OWN CARE AND PRESENTEEISM: A CROSS SECTIONAL STUDY

Original Article, Int J Public Health

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

This study investigated the prevalence of forgoing care and sick leave in primary care physicians in Switzerland and its attributable factors.

Female PCPs or those younger than 45 years of age represented significantly higher proportion of participants who forwent care and sick-leave due to workload reasons and to their commitment to patients, respectively. The odds of forgoing care for heavy workloads were lower among PCPs 65 years of age or older, or those having a personal GP, and were higher among PCPs practicing in suburban or rural areas. Factors associated with forgoing sick-leave included being female, swiss, in poorer health, with chronic health condition and number of half-days worked per week. Forgoing sick-leave was less likely among PCPs  $\geq 65$  years of age.

#### **Q 2** Please highlight the limitations and strengths.

Strengths of this study include the sample size ( $n=503$ ) with high response rate of 50%.

Limitations: It only focused on the French speaking part of Switzerland; PCPs practicing in the German and Italian speaking regions might have different personal professional and cultural attributes, therefore limiting the generalizability of the results.

For female PCPs, it would be interesting to see if there are any differences in forgoing care and sick-leave if married and have children versus none. If not possible, it should be mentioned under limitations.

Data collection took place during a pandemic and restriction measures. This should be accounted for in the study as patient workload, staffing and health seeking behaviors may be different and therefore have an influence on the results.

#### **Q 3** Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The study reads well, is concise and comprehensible. Especially introduction and discussions sections were very well written. Study is well conducted on a large sample with good response rate. There is a major concern about the post-hoc nature of the statistical analysis and its p-hacking approach. Minor comments (if not marked as major) are:

[Major comment]: The confirmatory statistical analysis is badly matched to the non-experimental, explanatory design. A tremendous amount of fishing was conducted with sub-sub analysis [e.g. line 137ff.] to find significant p-values. The approach with selection of variables based on univariate analysis, followed with backward selection results does not result in correct inference as the inference presented was meant to test prespecified hypotheses. The presented inference thus results in falsely narrow, p-values that do not have the proper meaning, biased regression coefficients that need shrinkage, and severe problems in the presence of collinearity.

#### Abstract:

Line 4: This is difficult to grasp at first read as "forgoing care" could be understood with respect to patients. Maybe rephrase as forgoing care when "sick themselves", or "for themselves".

Line 13: [Presenteeism was associated with female sex, younger age, having a chronic illness, working in a suburban area and working full-time.]

It may be better to avoid "terms" that require a definition (presenteeism). Instead, either explain in brackets what it means or just avoid this word and use instead: "coming to work when they shouldn't". The term is introduced later, but not yet in the abstract.

Line 19–20 [Major comment]: In conclusion the author states [PCPs' position and image in society should also be questioned]: this conclusion is hardly related to the study? The conclusion requires revision, to better reflect on the findings of the study.

#### Introduction:

Clear, coherent, logical sequence, adequate research background.

Line 53: otherS without "s".

Line 67–68: in a representative sample. It is unclear how to substantiate this claim and it should be avoided

#### Methods section,

Study design and population: line 73–77 [The present study was based on a larger, cross-sectional survey on the health of PCPs (general practitioners, paediatricians and gynaecologists) in French-speaking regions of Switzerland (representing about one third of Switzerland's 8.5 million inhabitants) in autumn 2020. A sample of 1,000 PCPs was randomly drawn from a Swiss Medical Association list (N = 2,455 PCPs) covering about 95% of PCPs in Switzerland.]

The author first writes that participants are from PCPs in the French speaking area of Switzerland. Then adds that random sample is taken from SMA which covers 95% of PCPs in Switzerland. How random sample and how French speaking? These sentences require more clarification.

[Major comment] In the methods section, data part, line 88–90: [medical history of main chronic physical and psychological diseases over the five last years through a list of diseases and treatments,], authors wrote that they have asked participants about medical condition with list of diseases and treatment:

(1) it would be interesting to provide an appendix of the list of diseases and treatments;

(2) It would be interesting to differentiate between physical and psychological illnesses– as it is part of the literature background in in the introduction, line 39–39 [Forgoing care has mainly been studied in the context of the psychological distress linked to physicians' substantial exposure to occupational stress [16], particularly among GPs [17, 18].]. Also, it may provide a better picture of what's more prevalent: physical vs. psychological illnesses in terms of forgoing care and sick leave. Forgoing care and sick-leave for psychological problems might lead to burn-out, if not already existing. That would be equally important to watch out for.

Under Statistical analysis section, line 105–116:

[Major comment] Besides logistic regression, the authors used another significance test (global test) in Table 2 which was not referred to in the methods section. Level of significance adopted in the study is not mentioned neither (e.g. for the stepwise selection). The authors did not report how they handled missing values neither in the text nor reflected in the tables. The statistical software used is not reported. These comments should be addressed in light of the general concern with the statistical analysis uttered at the beginning of this section.

#### Discussion section

Line 181: Say the rate found for Switzerland.

Lines 210– 212: "However, presenteeism was clearly associated with female sex. Davidson reported sex differences in opinions and attitudes regarding illness behaviour: women physicians were more likely than men to report that finding a doctor was difficult [12]".

The finding is certainly in line with previous findings, female physicians presenteeism was previously linked to their concern for others and their worry over work piling up more often than men.

lines 212– 214: "The medical profession's increasing feminisation and the often greater overall burden on women (in their private and professional lives) has raised fears that the negative impacts of these illness behaviours will increase over time." Citation is needed for this statement.

[Major comment] Conclusion, line 253–254: "Finally, the position and image of physicians in our societies should be questioned as well." Consider revising, not within the scope of the study. See also same comment for abstract

[Major comment]: Urbanity levels must be defined. Based on what metric was the categorization conducted?

"Chronic illness" remains unclear as a term. How was it assessed. Was there simply a question on "did you have any chronic illness?"?

"Out-of-hours duty" variable needs explanation/definition. Maybe the respective questions can be described.

Table 1: It is suggested to also categorize "numbers of years working in private practice", then the last columns (which only uses up a lot of space) can be entirely skipped.

Table 2: it doesn't specify which significance test was used.

(10-2) should be replaced by 0.01 to be consistent.

Show all p-values for this explanatory analysis (why hiding the non-significant ones?).

Abbreviations in table 2 under specialties are not specified in the table footnotes.

Style (of header) is different than in Table 1.

Table 3 and Table 4, it doesn't show which results are significant except in bold, but not referred to in the footnote nor the significance level was mentioned.

Perceived health is categorical: where all data with categories except "excellent" and "very bad" dropped from the analysis? If not, what is the effect size for the other categories?

All tables: continuous variables may be better categorized, i.e.: perceived health, number of half days worked per week, and seniority in years.

Out of hours duty (It is not clear if it is a continuous or binary variable)? Authors may consider specifying it. If binary, reference group may be better shown for uniformity.

The same applies to other binary variables.: existing chronic disease, have their own doctor.

#### PLEASE COMMENT

##### **Q 4** Is the title appropriate, concise, attractive?

The title is too general and does not reveal what the study is precisely about: it says "illness behavior", rather than sick leave and forgoing care.

##### **Q 5** Are the keywords appropriate?

They are appropriate, authors can add Presenteeism.

##### **Q 6** Is the English language of sufficient quality?

The English language is good; however, authors can use simpler and easier to understand words that can imply the same. In introduction, line 65 and strengths and limitations line 242 word deleterious can be replaced with an easy to understand one, i.e.: harmful?

##### **Q 7** Is the quality of the figures and tables satisfactory?

No.

##### **Q 8** Does the reference list cover the relevant literature adequately and in an unbiased manner?)

Yes

#### QUALITY ASSESSMENT

<b>Q 9</b>	Originality	<div><div></div><div></div><div></div><div></div><div></div></div>
<b>Q 10</b>	Rigor	<div><div></div><div></div><div></div><div></div><div></div></div>
<b>Q 11</b>	Significance to the field	<div><div></div><div></div><div></div><div></div><div></div></div>
<b>Q 12</b>	Interest to a general audience	<div><div></div><div></div><div></div><div></div><div></div></div>
<b>Q 13</b>	Quality of the writing	<div><div></div><div></div><div></div><div></div><div></div></div>
<b>Q 14</b>	Overall scientific quality of the study	<div><div></div><div></div><div></div><div></div><div></div></div>

#### REVISION LEVEL

**Q 15** Please make a recommendation based on your comments:

Major revisions.